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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,754	11/29/2001	Timothy L. Daugherty	MAY006-061	2038

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EXAMINER

MOORE, MARGARET G

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,754

Applicant(s)

DAUGHERTY, TIMOTHY L.

Examiner

Margaret G. Moore

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1712



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 29 and 43 to 53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 to 29 and 43 to 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Please note that this application has been transferred to a new examiner. While this current examiner believes that a restriction requirement, based on an intermediate-final product relationship, could be made, it is not an undue burden for the Examiner to examine all of the claims now pending. As such a restriction requirement is not necessary. Claims 1 to 29 and 43 to 53 are currently under consideration.

2. Claim 2 is objected to because of the following informalities: In the selection for A, Mn is contained within parenthesis. This does not appear to be necessary and is somewhat confusing. Appropriate correction is required.

3. Claims 1 - 29 and 43 - 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is intended by the term "hardening agent". Applicants define this term on page 9 of the specification as a component which crosslinks with the binder component. However many of the exemplified hardening agents do not appear to be able to crosslink with a silicone resin. For instance, diamond powder and WC have no apparent crosslinkable groups. Since it is not certain how these agents can crosslink with the binder, it is unclear what is intended and embraced by this term.

4. Claims 1 to 29 and 43 to 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to teach how the hardening agents can be used to crosslink the binder component, since most of these agents have no apparent ability to crosslink. Thus the specification fails to teach how to make the invention as it does not teach how to crosslink the binder with these hardening agents.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 11 to 13, 15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Herber et al.

Herber et al. teach coating compositions. See for instance the compositions prepared on Table 1. Component IVb is a black spinel pigment, component Ia is a silicone resin and component II meets the claimed hardening agent. Such a composition anticipates claim 1. The iron oxide and water in these compositions anticipate the limitations of claims 11 and 12. Column 6, line 40, teaches the optional addition of a solvent. This composition is liquid at room temperature. In this manner Herber et al. anticipate the instant claims.

8. Claims 21, 24 to 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herber et al.

The Examiner notes that Herber et al. do not specifically teach using this coating composition to coat the inside of an oven cavity or oven rack; however, line 8 of column 7 teaches that this composition can be used to coat surfaces that are exposed to heat. The Examiner notes that coating an oven cavity or oven rack with a silicone coating is known in the art due to the high temperature resistant properties that are inherently associated with silicone resins. Thus, realizing that the coating composition of Herber

et al. is appropriate for high temperature utilities, one having ordinary skill in the art would have found it obvious to use the composition of Herber et al. to coat an oven rack or the interior of an oven cavity. As such, these claims would have been obvious to the skilled artisan.

9. Claims 2, 3, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herber et al. as applied to claims 1 and 21 above, and further in view of Wussow et al.

Herber et al. generally teach a black spinel pigment, but fail to specifically define the compositional make up of the spinel.

Column 1, lines 29 to 31, of Wussow et al. teaches the black pigments based on copper-chromium spinels meeting the pigment in claim 3 are known to be used in the formation of heat resistant coatings based on silicone resin. Thus one having ordinary skill in the art would have been motivated by the teachings in Wussow et al. to use such a spinel in the coating composition of Herber et al., which is used to form heat resistant coatings. In this manner one having ordinary skill in the art would have found the claimed coating composition obvious.

10. Claims 1, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Decker et al.

Decker et al. teach a coating composition. Particular attention is drawn to the compositions shown in Table 1. This includes a silicone resin, a black spinel pigment and wollastonite filler (calcium silicate), which can be considered a hardening agent as well as a metal oxide. In this manner Decker et al. anticipate claims 1, 11 and 13.

11. Claims 14, 21, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decker et al.

Regarding claim 14, the Examiner notes that the silicone resins used in Decker et al. are methyl-phenyl silicone resins. Adjusting the ratio of methyl to phenyl groups would have been well within the skill of the ordinary artisan. In view of the broad range

in claim 14, one having ordinary skill in the art would have found a methyl to phenyl ratio within this range to have been obvious and well within routine experimentation.

Regarding claim 21, note column 3, line 49, which teaches using the coating composition therein to coat oven parts. From this one having ordinary skill in the art would have found a cooking appliance, i.e. an oven, as claimed to have been obvious.

12. Claims 1, 11 to 13, 15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson.

Johnson teaches a coating composition that contains a polysiloxane and an iron-manganese spinel. Note Tables I and II on column 8, which show compositions that contain silica, meeting the claimed hardening agent and claim 17. In this manner Johnson anticipate the instant claims. The Examiner notes that the spinel component meets the requirement of a metal oxide found in claim 11. Column 6, lines 40 to 50, teaches the addition of an organic solvent, meeting claim 15. Note too that the catalyst in the examples is added in solution, also meeting claim 12 and 15.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson.

Johnson teaches on the bottom of column 2 that the siloxane used therein can be a phenylmethylpolysiloxane. Thus one having ordinary skill in the art would have been motivated to select a phenylmethylpolysiloxane having a phenyl to methyl ratio within the broad range of claim 14 with a reasonable expectation of success. As such this limitation would have been obvious in view of the teachings of Johnson.


14. The remaining references are cited as being of general interest. Eklund et al. teach a silicone resin coating composition but does not appear to be as close or closer to the instant claims that that cited supra. This reference teaches that the coating can be used to coat kitchen appliances as well as substrates that require heat resistance. Bouwkamp-Wijnnotz et al. fails to specifically teach a composition having a hardening agent.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
2/16/04